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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,108	12/24/2003	Tutomu Nishi	81784.0298	6922
26021	7590	06/14/2005	EXAMINER	
HOGAN & HARTSON L.L.P. 500 S. GRAND AVENUE SUITE 1900 LOS ANGELES, CA 90071-2611			ELLIS, SUEZU Y	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/748,108	Applicant(s) NISHI, TUTOMU	
	Examiner Suezu Ellis	Art Unit 2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 1,3 and 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the connection line that intersects the power source potential layer above the power source potential layer (claim 1) and the group of lower conductive layers and the two upper conductive layers (claim 3) must be shown or the features canceled from the claims. No new matter should be entered.

The drawings are objected to because Fig. 5 and 7 fail to particularly point out the difference between the connection line (34) and the power source potential layer (32).

Figures 1-4 and 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not

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be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: On pg. 2, line 26, the amplifier is referenced as 20a. This is not consistent with the drawing. Perhaps applicant intends the reference number to be 28a.

On pg. 3, line 27 – pg. 4, line 2, the specification fails to clearly describe how a power source potential layer is belt-like.

The specification fails to clearly support the upper and lower conductive layers, as recited in claim 3. Are the upper and lower conductive layers the same as the first and second conduction layers of the connection line?

Appropriate correction is required.

Claim Objections

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Claims 1, 3 and 4 are objected to because of the following informalities:

In claims 1 and 3, line 10, for ease of understanding, perhaps applicant will replace "higher than" with --above--. In claim 1, lines 12-18, please reword the paragraph for clarity. Suggested modification is "wherein a connection line, which is formed in a region immediately above the power source potential layer, intersects the power source potential layer for electrically connecting the light receiving element and the signal processing section and is formed by one of the plurality of conductive layers".

In claim 4, line 6, the word "width" is misspelled.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3 and 4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 3 recites "two upper conductive layers in parallel to each other above the lower conductive layers where each upper conductive layer includes a first region that extends in the

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direction intersecting the extending direction of the lower conductive layers and a second region extending along the extending direction of the lower conductive layers”, which is not clearly described in the specification or in the drawings to enable a person skilled in the art to make or use the invention.

Claim 4 is non-enabling due to its dependency.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, it is unclear as to what the applicant means by “belt-like power source potential layer”. Applicant describes a belt-like scaler (pg. 1, lines 24-26) moving in directions in accordance with the movement of a printer head. Is a belt-like power source potential layer the same? Does it physically move similarly to a belt-like scaler? Please clarify.

In lines 9 and 10, it is also unclear as to what the applicant means by “potential of the power source potential layer being pulled up to power source potential”. How is this pulling action performed? Is the pulling a physical action? Please clarify.

In lines 12-13, it is unclear as to how a connection line intersects the power source potential layer above the power source potential layer. It is

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understood the connection line is formed above the power source potential layer but drawings fail to illustrate the connection line intersecting the power source potential layer. Further, the way the claim language is written, it is unclear as to how a power source potential layer can be intersected above itself. Please clarify or rewrite the claim.

Claim 2 is indefinite due to its dependency.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by the prior art disclosed by the applicant (Nishi, US 2004/014423).

With respect to claim 1, Nishi discloses in Fig. 3, 5 and 6, prior art that illustrates the conventional structure of an integrated circuit for an optical encoder with all the limitations in claim 1, which includes a signal processing section ([0006], lines 4-6), a power source potential layer between the signal processing section and a light receiving element (item 32 of Fig. 6; [0009], lines 4-11), a

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plurality of conductive layers at different heights and a connection line formed by a conductive layer above the power source potential layer ([0010], lines 5-8, 13-18), and a connection line located above the power source potential layer and intersects the layer(Fig. 6).

Allowable Subject Matter

Claim 2 would be allowable if rewritten to overcome the rejection under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

With respect to claim 2, prior art fails to teach or reasonably suggest, singly or in combination, the width of the power source potential layer in the region where the power source potential layer intersects the connection line is smaller than the width of the power source potential layer in the remaining region.

Telephone/Fax Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suez Ellis whose telephone number is 571-272-2868. The examiner can normally be reached on 8:30am-7pm (Monday-Thursday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax

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phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Stephone B. Allen
Primary Examiner